

## Aging in Place

### *The roles and uses of telehealth*

#### **Louisiana IT Integration Advisory Group**

November 19, 2009  
Baton Rouge, Louisiana

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Chief Professional Officer  
Living Independently Group



## Agenda

Background and overview

Technologies for Family and Professional Caregivers

Telehealth in Medicaid Waiver Programs – 2 examples

#### Appendices:

- 1 The Shift to Care-at-Home
- 2 Promoting Wellness and Enhancing Independence (Technologies for the Senior)
  - Factors in Choosing Telehealth Technology
- 3 NCOA's Chronic Disease Self-Management Program

## Drivers of Care-at-Home

*According to Larry Minnix, President  
American Association of Homes & Services  
For the Aging*

- The needs of our aging society are outgrowing the service delivery, payment, and policy systems we have to manage them.
- We are in a transformational era of aging services.

## Drivers of Care-at-Home

### *Minnix foresees:*

- Home will become the dominant venue of choice for people facing chronic conditions.
- The creation of community-based networks of care will be the dominant business paradigm.

New and innovative housing with services models will emerge.

## Larry Minnix continued...

- New service enterprises will sprout all over America to enable older consumers to stay in their homes.
- **Technology will be the accelerator to make consumer-directed, home-centered care the new model**

## Promoting Wellness and Enhancing Independence

### *Technologies for Care Providers*

### Selecting The Appropriate Technology

## Promoting Wellness and Enhancing Independence

### *Technologies for Care Providers*

#### Key Components of Telehealth

## The defining challenge facing long term care providers

How do we balance the preservation of independence, dignity, and privacy with the demands of protective security and world class care... in a cost effective manner?

Is technology an answer? And if so...  
How do we decide which technology?

## Kinds of Telemonitoring in Community-based Long-Term-Care

PERS – Personal Emergency Response Systems

Vital Signs/Biometric Telemonitoring

- Blood Pressure, Blood Glucose, Weight, Pulse Oxygen Levels, Blood Coagulation, etc
- Valuable for COPD, CHF, Diabetes

Tele-Health Management – Video conferencing

Medication Management

Behavioral Telemonitoring

- Wake up, Falls, Eating, Sleeping, Toileting, etc

## Roles of Telemonitoring

- Help professional and family caregivers to remotely deliver care and assess patient need.
- Enable them to coordinate, dispatch and track delivery of services
- Allow the early identification of the onset of disease, prescribe appropriate interventions, and monitor the efficacy of those interventions.
- Provides timely, accurate, and actionable information to inform decision-making

## Vital Signs/Biometric Tele-Monitoring

- Measurements create a continual record for greater accuracy of disease state assessment.
- Vital signs trending can be displayed and intervention can occur before a crisis.
- In home monitoring devices guide high risk patients in the collecting of relevant clinical information.

## Telehealth Services

### *Vital Signs Biometric Tele-Monitoring*



## Remote Telemonitoring Delivering health/disease management that ....

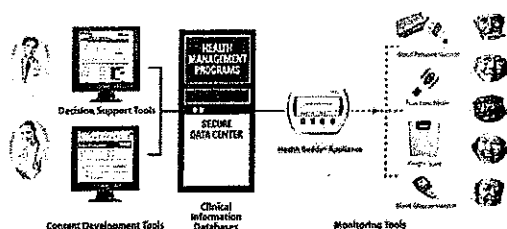
- Guides patients in self-care, education, and the collection of clinical information, including health self-assessment, symptoms and vital signs.
- Allows healthcare providers to proactively manage, educate, and track a patient's chronic condition, utilizing best practices
- Provides early intervention and education enabling patients to become active members in their own health care.
- Seeks to remotely replicate in-person clinical visits

## Video Conferencing and Structured Automated Patient Counseling

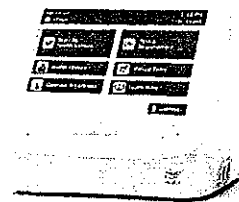
*Allows for live or programmed interviews with patients to:*

- Diagnose conditions,
- Monitor compliance, and
- Guide and reinforce behavioral changes

## Health Hero Network



## Evolving Technology - Intel



Intel Health Guide

## Prescription Medication Compliance Medication Telemonitoring

"Drugs don't work if people don't take them."

C. Everett Koop, MD

## Importance of Medication Adherence

Individuals with chronic conditions are living longer with better quality of life due in part to successful drug therapies.

Yet a poorly regulated medication regimen can contribute to the likelihood of falls, confusion, dizziness, depression, malnutrition, dehydration, incontinence and memory loss.

Up to 60% of all medication prescribed is taken incorrectly, or not at all.

Noncompliance includes:

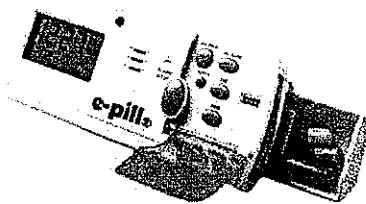
- Not filling a prescription,
- Over medication,
- Taking wrong medication,
- Taking right medication at wrong time,
- Taking wrong amount,
- Forgetting to take medication,
- Deliberately under dosing, or not taking medication.

## Noncompliance - The Numbers

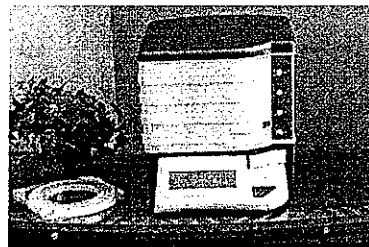
- Noncompliance leads to 3.5 million hospital admissions annually, or 11% of all admissions.
- In the elderly, 40% of all admissions are due to medication problems.
- Noncompliance is the greatest cause of re-admissions to hospitals.
- Noncompliance causes the admission of 380,000 patients to nursing homes (23% of all admissions) and is the key factor in other admissions.
- An estimated 125,000 lives could be saved annually with better medication compliance
- *For many of us timely reminders can be helpful if not essential*

## Medication Management System I

Portable Daily Medication Dispenser



## Medication Management System II



## Comprehensive Med Management Systems

- Securely stores self filled or pharmacy-filled medication, and releases it on the prescribed schedule.
- As needed medications (PRN) are available only as prescribed.
- Provides visual and audible reminders to the user and caregiver for medications and activities of daily living.
- Allows for the remote changing of medications.
- Alerts a caregiver or a Call Center in the event of non-compliance.
- Allows an electronic interface with the pharmacist/caregiver.
- Automatically notifies when it is time to reorder medication and maintains inventory.
- Creates and stores electronic medication records that can be viewed by the caregiver via secure Customer website.
- Allows for one month supply of medications – reducing unnecessary nursing visits.

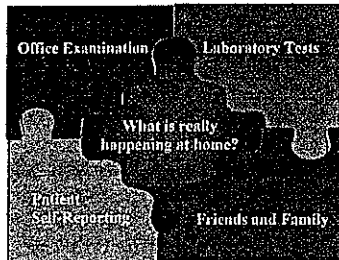
## Telecare

*The new frontier in telemonitoring*

A range of technologies that provide:

- Continuous, automatic, remote monitoring of real time emergencies and lifestyle changes over time in order to manage the risks of independent living.
- It enables the caregiver to get a clearer picture of what is 'really' going on in the home.

### How the Technologies Fit

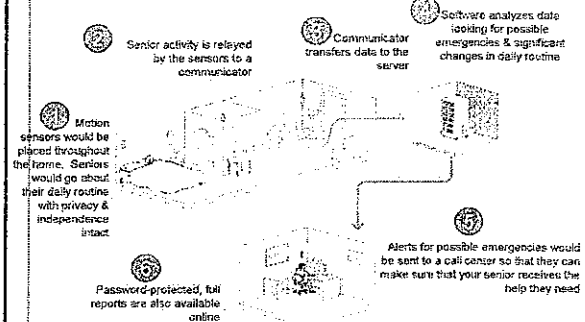


What do outer pieces have in common? They seek to replicate remotely, the process by which information is gathered in an office or clinic visit.

Dilemma - "Do you remember if you forgot to take your medication?"

### Telecare

Camera free, 24 x 7 safety and security system



### Telecare Services: Cost Savings

- Decreased hospitalizations and lengths of stay.
- Decreased use of nursing facilities for long term care.
- Decreased use of Emergency Room for exacerbation of symptoms relating to chronic conditions.
- Decreased number of visits to primary physician.

Majd Alwan, PhD – Executive Director, CAST

### Value of Telecare

- Can signal for help even if the senior is incapable of doing so.
- Totally passive. No mental, physical, or visual acuity or language skills required for use – assures compliance.
- Minimally intrusive. Respects privacy.
- Provides insights about the needs of the senior enabling more person-centered care.
- Improves communication/coordination among caregivers and between the senior and her/his caregivers.
- Helps caregivers coordinate, dispatch and track the delivery of needed care and services.
- Documents compliance with care plan.

### Paying for Telecare

#### Telehealth Under the Medicaid Waiver

- The Pennsylvania and Arkansas Experience – Nursing Home Diversion Initiatives.
  - Traditional waiver (PA)
  - Money Follows the Person (AR)

### PA Waiver and OPTIONS Program

- Background
- Approved Technologies
- Integration into care planning and care management
- Expansion of population eligible for Telecare Services
- (A copy of the PA Telecare Definitions and Standards will be distributed to the Committee)

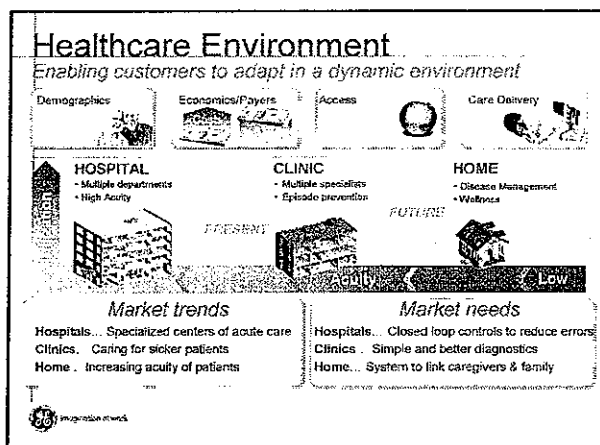
## Summary

Innovations that include technology, but retain compassion and allow for autonomy are crucial for safeguarding the goals of society and the rights of its older citizens.

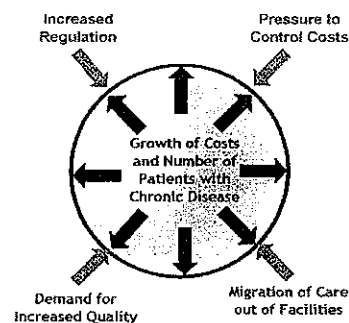
We are actively choosing to put the technology in the hands of the consumers (caregivers and seniors) who can help drive transformation at the health system level.

## Appendix I

### The Shift to Care-at-Home



### Factors Impacting on Care-at-Home and the use of Technology

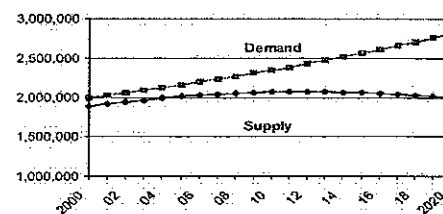


## Other Factors

- Staff shortages
- Challenges of rural healthcare delivery
- The Olmstead Decision
- Demand for accountability
- Increased liability insurance costs
- Payment incentives
- Spiraling cost of chronic care

## Influencing factors

### Projections of Demand and Supply ... Registered Nurse FTE



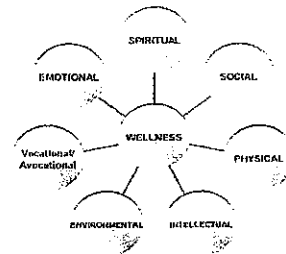
Sources: Bureau of Health Professions, National Center for Health Workforce Analysis, Projected Supply, Demand and Shortages of Registered Nurses: 2000-2020, Washington, D.C.: U.S. Department of Health and Human Services, July 2002.

## Appendix II

Promoting Wellness and Enhancing  
Independence

### *Technologies for Seniors*

## Interrelated Components of Wellness



## What are Seniors looking for?

To stay in their homes or close to home  
Not to retire; to continue working  
Lifelong learning; continuing education  
To remain "engaged" in community  
To confirm their ongoing "value" to society  
Greater control over their healthcare  
To receive personalized care/services

Source: Johns Hopkins Medicine

## Some Technologies/Approaches To:

Create/preserve community, foster self-worth  
and independence, and stimulate the mind and  
body

- Social Connectedness: Email, Facebook, video conferencing, GrandCare
- Socialization: University-Without-Walls, Virtual Senior Centers
- Spiritual: Broadcast of religious services
- Environment: Universal Design, Smart House
- Recreation/Exercise: Wii, Creative Action
- Intellectual Stimulation: Dakim, Book Readers
- Emotional: It's Never 2 Late

## Appendix III

### Factors in Choosing Telehealth Technology

## CAST Technology Provider Survey Types of Technology

- Biometric/vital signs information & monitoring
- Care plans/care coordination
- Clinical/care documentation
- Early identification of the onset of illness
- Electronic medical/health records
- Emergency Response capacity
- Fall prevention/detection
- Wander management
- Health/wellness assessments
- Medication management
- ADL monitoring
- Staff Accountability - Risk Management

- Center for Aging Services Technology

### Selecting Technologies – Some Considerations

- Does it help you to achieve your mission/goals?
- Usability – for client, for family and professional caregivers (Learning curve)
- User acceptance, compliance
- Do you have, or can you develop the leadership to implement?
- How will it integrate into your care delivery system?
- Who will use the information?

### In-Home Technology

According to Johns Hopkins Medicine the greatest changes **WILL** come from non-traditional sources such as:

- Home Depot
- Best Buy
- Comcast
- Verizon
- WalMart
- Intel


### Selecting Technologies – Some Considerations – cont'd

- Will the technology evolve as your needs evolve?
- Will it be *the* industry standard or the next Sony Betamax?
- What is level and quality of vendor support?
- How well does the technology match your clients' needs? One size doesn't fit all

### Appendix V

#### **Chronic Disease Self-Management Program** (National Council on Aging)


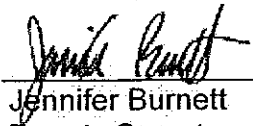
The Power of Offering Consumers the Choice  
of In-Person and Virtual Group Participation  
(Please See Attachment)

 <p><b>COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF AGING Harrisburg, PA 17101</b></p>	<b>PENNSYLVANIA DEPARTMENT OF AGING</b>	
	<b>1. File Number:</b>  APD # 09-01-05	<b>2. Disposition:</b> Supplements Home & Community Based Procedures Manual
	<b>3. Issuance Date:</b>  October 1, 2009	<b>4. Effective Date:</b>  Immediately
	<b>5. Program Area:</b> Administration	
<b>6. Origin:</b>  Office of Long-Term Living (OLTL)		<b>7. Contact:</b> OLTL, Bureau of Policy & Strategic Planning (717) 772-0205

### **AGING PROGRAM DIRECTIVE**

**SUBJECT: TELECARE SERVICE DEFINITIONS AND STANDARDS**

**TO:** EXECUTIVE STAFF                      OFFICE OF LONG-TERM LIVING  
AAA DIRECTORS                      PA DEPARTMENT OF AGING  
HCBS PROVIDERS

**FROM:**    
John Michael Hall                      Jennifer Burnett  
Secretary                      Deputy Secretary  
Pennsylvania Department of Aging                      Office of Long-Term Living

**PURPOSE:** The purpose of this Aging Program Directive (APD) is to provide guidance on TeleCare services under the Aging Waiver and Options program.

**SCOPE:** This APD is directed to all Area Agencies on Aging (AAAs) and AAA staff responsible for the authorization and oversight of TeleCare services and applies to all providers of TeleCare services seeking to enroll or are enrolled as approved Aging Waiver providers and/or contracted AAA service providers.

**BACKGROUND:** In early 2007, several stakeholders put forth the idea that Pennsylvania actively pursue the delivery of technology supported services. Often referred to as telemedicine or telehealth nationally, supportive services through the use of technology are recognized as TeleCare. By September 2007, a demonstration project was announced and the TeleCare service standards were introduced to the AAA network.

The demonstration project allowed for several new services to be incorporated under the heading of TeleCare and incorporated the freestanding service of Personal Emergency Response System (PERS) along with Health Status Measuring and Monitoring and Quality of Life Technology, i.e., Activity Sensor Monitoring and Medication Dispensing and Monitoring. Over the past year, input from the AAAs and providers has been collected and used to refine this service definition and standard.

**DISCUSSION:**

TeleCare is a model of service that employs technology with services to empower people with chronic conditions to remain independent. TeleCare integrates social and healthcare services with technology to sustain and promote quality of life and reduce unnecessary institutionalization. By utilizing in-home technology, Pennsylvania will have more options to assist and support individuals so that they can remain in their own homes. TeleCare complements home and community based services by facilitating timely and equitable resource allocation based on participant needs and improvement to quality of life.

TeleCare services are to be utilized for participants where there is a demonstrated need for the services and it has been determined that the services are not covered under Medicare or other third party resources. In instances where Medicare or other third party payer services are in place, TeleCare services will not be approved by the case manager and AAA nursing staff. TeleCare services are to be provided in an efficient manner, preventing duplication of services, unnecessary costs and unnecessary administrative tasks.

The participant's home must be evaluated by the service provider to ensure that there is an adequate living environment with sufficient utilities to meet the manufacturer's specifications for TeleCare equipment. TeleCare Services that are web-based must be HIPAA compliant. The documentation collected from the use of TeleCare services must be available to the AAA and Office of Long-Term Living (OLTL) upon request from the provider. All reports and data must be maintained by the provider and made available for at least 3 years past removal of the equipment. Providers shall assure that individuals providing services meet Medicare qualifications and standards; and that equipment meets all manufacturers' qualifications and standards for the appropriate type of TeleCare services.

Participant service plans including TeleCare services must adhere to Pennsylvania Department of Aging, Office of Long-Term Living policies for Service plan review as outlined in APD # 06-01-03. TeleCare services are not to be used as a one time emergency service. The Older Adults Protective Services Act, the Department of Aging's APD# 09-01-01, Incident Reporting Policy and Neglect of a Care Dependent Person are all applicable to recipients of this service.

The following types of services are included under the umbrella of TeleCare services.

***Health Status Measuring and Monitoring:*** Using wireless technology or a phone line, this service includes electronic communication between the participant and healthcare provider that focuses on collecting health related data, i.e., vital signs information such as pulse and blood pressure that assists the healthcare provider in assessing the participant's condition, and providing education and consultation.

***Activity and Sensor Monitoring:*** This service employs sensor-based technology on a 24 hour/7 day basis by remotely monitoring and passively

tracking participants' daily routines and may report on the following: wake up times, overnight bathroom usage, bathroom falls, medication usage, meal preparation and room temperature.

***Medication Dispensing and Monitoring:*** This service assists participants by dispensing and monitoring medication compliance. A remote monitoring system is personally pre-programmed for each participant to dispense and monitor compliance and notifies the provider or family caregiver of missed doses or non-compliance with medication therapy.

## **ELIGIBILITY**

To qualify for TeleCare services, the participant must be clinically eligible for nursing facility care (NFCE). In addition, the Department will consider the following factors when authorizing TeleCare services:

The participant presents with two or more of the following conditions/situations for **Health Status Measuring and Monitoring Service, Activity and Sensor Monitoring Service and Medication Dispensing and Monitoring Services:**

- Hospitalization in the past year;
- Medical Diagnosis of depression or other mental health issues;
- Use of the emergency room in the last year;
- Poor adherence with physician's orders or medications;
- Formal or informal support systems are limited or absent;
- History of falls within the last six months that resulted in an injury;
- Lives alone or is at home alone for extended periods of time;
- Service access challenges.

The participant is sufficiently cognitively intact and able to physically operate the equipment (i.e., able to see the monitor or put on the blood pressure cuff) **OR** has a caregiver willing and able to assist with the equipment, unless the service does not require active participation of the participant.

The participant's home will be evaluated by the service provider to ensure that the TeleCare equipment works properly. Adequate utilities to meet the manufacturer's specifications for equipment and the living situation/environment must allow for adequate adaptation of the equipment. Home adaptations are not included as part of this service.

A determination is made that there is a demonstrated need for the services and it has been determined that the requested services are not duplicate covered benefit services under Medicare or other third party resources.

If additional services are recommended due to changes identified by this monitoring in the participant's condition, the case manager must be informed and services approved in consultation with the AAA nurse. When the change in condition requires a skilled level of care, the home health agency (HHA) provider should access Medicare and other third party payers for the services and notify the AAA of the participant's Medicare eligibility.

If the participant's condition changes and requires skilled services covered by Medicare, the Waiver/OPTIONS program will no longer authorize the use of TeleCare. However under the Waiver/OPTIONS program, if reimbursement is on a monthly basis, the equipment should remain for that 30-day period. It is at the discretion of the provider to leave the equipment in place for the Medicare benefit period, however it cannot be charged to the Waiver/Options program during this period. It is at the discretion of the provider to remove or keep the equipment in the participant's home after the month's reimbursement is over.

**NOTE:** TeleCare service is dependent on the home environment having such basic equipment such as electric and telephone service. It is not meant to provide home modifications or to provide payment for technology such as Internet access, upgrade telephone access, etc. to adapt the home environment. Home modifications can be requested as a separate service under the Options and Aging Waiver programs as needed.

## SERVICE

## DESCRIPTIONS

### HEALTH STATUS MEASURING AND MONITORING SERVICE

Health Status Measuring and Monitoring Service may be beneficial to participants with chronic medical conditions such as congestive heart failure, diabetes or pulmonary disease. Examples of Health Status Measuring and Monitoring Service may include, but are not limited to, weight, oxygen saturation measurements (pulse oximetry), and vital sign monitoring. Providers of Aging Waiver and Options program funded Health Status Measuring and Monitoring Services must be Medicare Certified HHAs enrolled in the Medical Assistance program. Any peripheral equipment must be capable of interfacing with Health Status Measuring and Monitoring Service equipment. Health Status Measuring and Monitoring equipment must be UL listed/certified or have 501 (k) clearance and/or must verify compliance for UL listing standards. A primary physician, physician assistant or nurse practitioner must order Health Status Measuring and Monitoring Service.

#### The reimbursement fee for this service will include:

- ♦ A one time fee at installation that covers both the cost of installation and removal of equipment;
- ♦ Daily rental of the equipment that will include repair and replacement of malfunctioning equipment;
- ♦ Training of the participant and/or their representative in the use of the equipment;
- ♦ Monitoring service activities by trained and qualified home health agency staff;
- ♦ Documentation of appropriate intervention based on information/data collected;
- ♦ Remote teaching and coaching provided as necessary to the participant and/or their representative;

- ♦ Ongoing provision of web-based data collection for each individual, as appropriate. This includes response to participant self-testing, as well as manufacturer's specified testing, self-auditing and quality control;
- ♦ Health Status Measuring and Monitoring activity by the provider's registered nurse;
- ♦ One monthly face-to-face visit by a registered nurse is included in the fee should the data collected from the health status monitoring warrant a visit. Should additional visits by a registered nurse need to occur during the month, those visits will be paid at the current Options/Waiver rates with AAA nurse approval. If data shows a potential emergency, the provider may dispatch a nurse without consultation with the AAA. However, by the next business day, the AAA nurse must be contacted for retroactive approval.

### **Roles and Responsibilities of the Area Agency on Aging (AAA)**

- ♦ The AAA will determine the need for service based on the completion of the Care Management Instrument (CMI) and applying the eligibility guidelines for TeleCare services;
- ♦ The AAA nurse will review the CMI and all other pertinent information, including but not limited to, information obtained by contacting the participant's health care providers to assure the appropriateness of the service;
- ♦ The AAA will ensure that the HHA has secured a primary physician, physician assistant or nurse practitioner order for the service;
- ♦ The AAA nurse and the case manager supervisor will review and approve the recommendation for the service;
- ♦ If there is a question regarding the need for the service, the AAA nurse should perform a face-to-face review to assess any concerns, e.g., to determine if the participant would benefit from Telecare service and/or is capable of properly using the system;
- ♦ The AAA nurse assists in the development of the service plan that includes this service;
- ♦ The AAA will follow OLTL guidelines for Service Plan Review Process;
- ♦ The AAA will coordinate the service plan with the HHA;
- ♦ The case manager will investigate the damage or misuse of the equipment with the participant/representative and provider to determine the continued use of the service;
- ♦ The AAA decision to discontinue the service shall be based on review of the participant's need(s) and information from the HHA. The AAA will provide the HHA written documentation with justification for removal of the equipment and notice to participants regarding their appeal rights.

### Roles and Responsibilities of the Provider

- ♦ Be a Medicare Certified HHA enrolled in the Medical Assistance Program that is an enrolled waiver provider or contracted Options provider;
- ♦ Develop and implement a service plan including the type, mode, and frequency of the service;
- ♦ Provide teaching and training to the participant and/or representative on the use, maintenance and safety of the equipment and how the service operates within the confines of the service plan;
- ♦ Ensure that all equipment is UL listed/certified or have 501(k) clearance and must document this compliance with the AAA;
- ♦ If additional services are recommended due to changes in the participant's condition, the case manager must be informed and services approved in consultation with the AAA nurse;
- ♦ Maintain clinical documentation of all service activities, data and all participant contacts;
- ♦ Remotely monitor, track and review the data collected and respond with interventions applicable to the type of technology in the home;
- ♦ Coordinate participant's current service plan with the AAA service plan;
- ♦ Coordinate/communicate with the AAA regarding the service plan and recommendation for service when the service plan is updated/modified, or at a minimum of at least every 60 days;
- ♦ Maintain an up to date event notification system, i.e., a system that provides information on changes in participant care;
- ♦ Update equipment when necessary, at no cost, as technology improves performance in the delivery of the service;
- ♦ Provide data and documentation to a designated individual upon request, i.e., individual/representative, case manager, OLTL staff or State Medicaid staff;
- ♦ Disconnect/remove the equipment from the participant's residence within the same month of notification of discontinuance by the Case manager;
- ♦ Repair or replace malfunctioning equipment within 24 hours of notification or identification. Events beyond the control of the provider, i.e., natural disaster or unforeseen circumstances, may delay or impact the repair or replacement of equipment in this timeframe. The AAA must receive a report detailing the issue and the disposition of the repair or replacement. Payment for repairs and replacement of equipment is the responsibility of the provider.
- ♦ Provide an **Informed Consent Form** to the participant that at a minimum states:
  - Right to accept, deny, or terminate the use of the TeleCare services;
  - Benefits and purpose of the services;
  - Risks associated with the use of the equipment;
  - Extent to which data will be collected, reviewed, shared and stored;
  - Assurance of confidentiality;

- No charge will be assigned by the provider to waiver participants and options participants will be responsible for only the AAA cost share;
- Subject to review and approval by the AAAs;
- Information associated with the maintenance and repair procedures for the equipment and call-in number for questions regarding operation of the equipment;
  - ♦ Review all data collection of peripheral devices (blood pressure, weight, glucometer readings, etc.) and follow-up with appropriate interventions;
  - ♦ Ensure that the Health Status Measuring and Monitoring Service is ordered by a primary physician, physician assistant or nurse practitioner and the order must:
    - Be obtained by the HHA prior to service authorization;
    - Include the specific nursing and/or therapeutic service required;
    - Reflect the client's medical condition as it relates to the special medical eligibility requirements;
    - Be obtained every 60 days for continuation of service.

#### **Provider Standards for Health Status Measuring and Monitoring Service:**

The provider in the delivery of services must:

- ♦ Install, maintain services, and ensure that the equipment is in proper working order;
- ♦ Deliver and install equipment and start service within 3 working days of receipt of the service order and notify the case manager of the equipment installation;
- ♦ Provide oversight of the system/equipment;
- ♦ Have a system in place for notification of emergency events to designated individuals;
- ♦ Ensure that individuals providing service meet provider qualifications under Medicare and Medicaid;
- ♦ Service data collected must be available at least 90% of the time to AAAs and participants/representatives when web-based systems are used;
- ♦ Provide direct participant contact employees training;
- ♦ Verify that all employees completing installation are adequately trained;
- ♦ Use and have on file, written staff training materials and procedures for services;
- ♦ Have a licensed registered nurse or licensed practical nurse evaluating participant data collected from the equipment and monitoring the service.

#### **Health Status Measuring and Monitoring Service Reporting:**

- ♦ Reporting includes documentation and service plan requirements, data analysis with tracking and trending and any other state and federal

requirements (e.g. communicable diseases, abuse and neglect, incident reporting, etc.). The AAA and OLTL will monitor the provider of services regarding compliance with reporting standards.

- ♦ Provider must document delivered services tracking and trending reports specified by OLTL.

### **ACTIVITY AND SENSOR MONITORING SERVICE**

A service that employs sensor based technology on a 24/7 day basis by remotely tracking the participant's activities of daily living. These activities may include, but are not limited to, various activities in the house and environmental temperature monitoring. Data is then transmitted to the caregiver and/or healthcare provider depending on the activity and sensor monitoring system employed. Activity and Sensor Monitoring Service equipment must be UL listed/certified. Providers of Aging Waiver and Options funded Activity and Sensor Monitoring Services can be provided by an enrolled Home Health Agency, Durable Medical Equipment (DME), Personal Care/Homemaker, Pharmacy or Hospital provider.

The AAA will authorize the use of Activity and Sensor Monitoring Services when other methods such as informal caregivers and other technology have been considered with documentation about how ineffective other methods or interventions would be for individual safety and monitoring.

#### **The reimbursement fee for this service will include:**

- ♦ A one time fee at installation that covers both the cost of installation and removal of equipment;
- ♦ Monthly rental of the equipment that will include repair and replacement of malfunctioning equipment;
- ♦ Training of the participant and/or their representative in the use of the equipment;
- ♦ Monitoring service activities by trained and qualified agency staff;
- ♦ Documentation of appropriate intervention based on information/data collected;
- ♦ Remote teaching and coaching provided as necessary to the participant and/or their representative;
- ♦ Ongoing provision of web-based data collection for each individual, as appropriate. This shall include response to participant self-testing, as well as manufacturer's specified testing, self-auditing and quality control;
- ♦ Included in the monthly fee is the provision of a personal emergency response system (PERS) that is required in conjunction with this service. PERS is subject to all of the current requirements under the Options and Aging Waiver services definitions.

#### **Roles and Responsibilities of the Area Agency on Aging (AAA):**

A physician's order is not necessary for this service. The remaining roles and responsibilities are the same as those stated for Health Status Monitoring and Measuring Service.

**Roles and Responsibilities for Activity and Sensor Monitoring Providers:**

The provider must:

- ♦ Be a Medicare Certified Home Health Agency (HHA), Durable Medical Equipment (DME), Personal Care/Homemaker, Pharmacy or Hospital that is an enrolled waiver provider or contracted Options provider;
- ♦ Develop and implement a service plan including the type, mode, and frequency of the service;
- ♦ Provide teaching and training to the participant and/or representative on the use, maintenance and safety of the equipment and how the service operates within the confines of the service plan;
- ♦ Ensure that all equipment is UL listed/certified or have 501K clearance and must document this compliance with the AAA;
- ♦ Notify the case manager if data collected indicates a change in the participant's condition and additional home health services are being recommended;
- ♦ Maintain clinical documentation of all service activities, data and all participant contacts;
- ♦ Remotely monitor, track and review the data collected and respond with interventions applicable to the type of technology in the home;
- ♦ Coordinate participant's current service plan with the AAA service plan;
- ♦ Coordinate/communicate with the AAA regarding the service plan and recommendation for service when the service plan is updated/modified or at a minimum of at least every 60 days;
- ♦ Maintain an up to date event notification system, i.e., a system that provides information on changes in participant care;
- ♦ Update equipment when necessary, at no cost, as technology improves performance in the delivery of the service;
- ♦ Provide data and documentation to designated individual upon request, i.e., individual/representative, case manager, OLTL staff or State Medicaid staff;
- ♦ Disconnect/remove the equipment from the participant's residence within the same month of notification of discontinuance by the Case manager;
- ♦ Repair or replace malfunctioning equipment within 48 hours of notification or identification. Events beyond the control, i.e., natural disaster or unforeseen circumstances, of the provider may delay or impact the repair or replacement of equipment in this timeframe. The AAA must receive a report detailing the issue and the disposition of the repair or replacement. Payment for repairs and replacement of equipment is the responsibility of the provider;
- ♦ Provide an ***Informed Consent Form*** to the participant that at a minimum states:

- Right to accept, deny, or terminate the use of the TeleCare services;
- Benefits and purpose of the services;
- Risks associated with the use of the equipment;
- Extent to which data will be collected, reviewed, shared and stored;
- Assurance of confidentiality;
- No charge will be assigned by the provider to waiver participants and Options participants will be responsible for AAA cost share;
- Subject to review and approval by the AAAs;
- Information associated with the maintenance and repair procedures for the equipment and call-in number for questions regarding operation of the equipment.

**Provider Standards for Activity and Sensor Monitoring Service:**

- ♦ Same as Health Status Measuring and Monitoring service with exception that an RN does not have to monitor this service.

**Activity and Sensor Monitoring Service Reporting:**

- ♦ Same as Health Status Measuring and Monitoring service.

**MEDICATION DISPENSING AND MONITORING SERVICES**

Remote Medication Dispensing and Monitoring is pre-programmed based on the needs of the participant to dispense and monitor medication compliance. A system will be in place to notify the provider or caregiver of missed doses or non-compliance with medication administration. This service may be used with individuals that demonstrate a cognitive deficit, need assistance with medication, and have demonstrated and documented past non-compliance with medication administration.

Medication Dispensing and Monitoring Service equipment must be UL listed/certified. The provider agency shall assure that all equipment meets service standards. Providers of Aging Waiver and Options funded Medication Dispensing and Monitoring Services can be provided by an enrolled Home Health Agency, Durable Medical Equipment (DME), Personal Care/Homemaker, Pharmacy or Hospital provider.

The use of Medication Dispensing and Monitoring Services will be authorized by the AAA when all other methods, such as: pharmacy filled blister packs/pillboxes and informal caregivers have been considered with documentation about how ineffective other methods would be for individual safety and monitoring.

***NOTE:*** If the Aging Waiver/Options participant only requires a medication dispenser unit and no monitoring services; the

*dispensing unit should be purchased and/or rented under special equipment and supplies. In this instance, the medication dispensing and monitoring service should not be authorized.*

**The reimbursement fee will include:**

- ♦ Same as Activity and Sensor Monitoring service.

**Roles and Responsibilities of the Area Agency on Aging (AAA):**

- ♦ A physician's order is not necessary for this service. The remaining roles and responsibilities are the same as those stated for Health Status Monitoring and Measuring Service.

**Roles and Responsibilities for Medication Dispensing and Monitoring Service Providers:**

- ♦ Same as Activity and Sensor Monitoring service.

**Provider Standards for Medication Dispensing and Monitoring Service:**

- ♦ Same as Activity and Sensor Monitoring service.

**Medication Dispensing and Monitoring Reporting:**

- ♦ Same as Health Status Measuring and Monitoring service.

***NOTE:*** All other medical equipment and supplies that will be of value to the individual to maintain them safely in the home can be purchased using medical equipment and supplies in the Aging Waiver and Options services.

## **Chronic Disease Self-Management Program**

**The Power of Offering Consumers the Choice  
of In-Person and Virtual Group Participation**

March 1, 2009



### **Stanford's Chronic Disease Self Management Program (CDSMP)**

Developed by Kate Lorig, RN, DrPH and her colleagues at Stanford University School of Medicine, CDSMP is the best researched self-care program.

- ✓ Supported by >25 years of federally-funded research from AHRQ, NIH, CDC
- ✓ Clear evidence of improved health coping and outcomes including:
  - Decreased disability
  - Increased energy and less fatigue
  - Increased exercise
  - Improved coping strategies including symptom management
  - Fewer physician visits and hospitalizations
- ✓ Significant results across diverse range of ethnic/racial populations -

## Stanford's Chronic Disease Self Management Program (CDSMP)

- **Not disease-specific; equally effective for those with multiple chronic diseases and co-morbidities**
- **Individualized goal setting/action plans**
  - ✓ Interactive group led by moderator over 6 weeks
  - ✓ Focus on behavior change
  - ✓ Guided structure (with evidence based content)
  - ✓ Self-tailored (with emphasis on the "real" not the ideal)
- **Available through two venues:**
  - ✓ In-person sessions offered in variety of community settings (senior centers, churches, union halls, etc.)
  - ✓ Virtual group sessions offered via the Internet



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CDSMP In-Person and Virtual 3

## Advantages of In-Person Group Settings

Dimension	Advantages of In-Person Setting
Reducing health disparities	<ul style="list-style-type: none"><li>▪ Known to be highly effective across a range of ethnic, racial and socio-economic groups</li></ul>
Accessibility	<ul style="list-style-type: none"><li>▪ Conducted in wide range of community settings</li><li>▪ No computer or computer literacy required</li></ul>
Personal Preference/ Learning Styles	<ul style="list-style-type: none"><li>▪ For those who prefer face-face personal interactions with other participants and peer leader</li></ul>
Social	<ul style="list-style-type: none"><li>▪ Builds community through social support &amp; new friendships</li></ul>
Health Care Reform	<ul style="list-style-type: none"><li>▪ Important element for Medical Home and related initiatives -particularly for those with health disparities</li></ul>



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CDSMP In-Person and Virtual 4

## Complementary Advantages of Virtual Group Settings

Dimension	Advantages of Virtual Setting
Reducing health disparities	<ul style="list-style-type: none"> <li>Available everywhere; equality of access in all communities</li> </ul>
Accessibility	<ul style="list-style-type: none"> <li>24/7 availability</li> <li>Health status &amp; mobility are not barriers</li> <li>Overcomes transportation challenges (logistics, distance, gas prices, weather)</li> <li>Reduces barriers due to disabilities, family, work and other responsibilities</li> <li>Recruitment to classes not restricted by geography</li> </ul>
Personal Preference/ Learning Styles	<ul style="list-style-type: none"> <li>Flexibility allows participants to respond at their own speed &amp; convenience</li> </ul>
Social	<ul style="list-style-type: none"> <li>Potential anonymity of online will be attractive to some</li> <li>Emerging opportunities for web-based social networking</li> </ul>
Health Care Reform	<ul style="list-style-type: none"> <li>Easily integrated with Health Information Technology (HIT) initiatives</li> </ul>

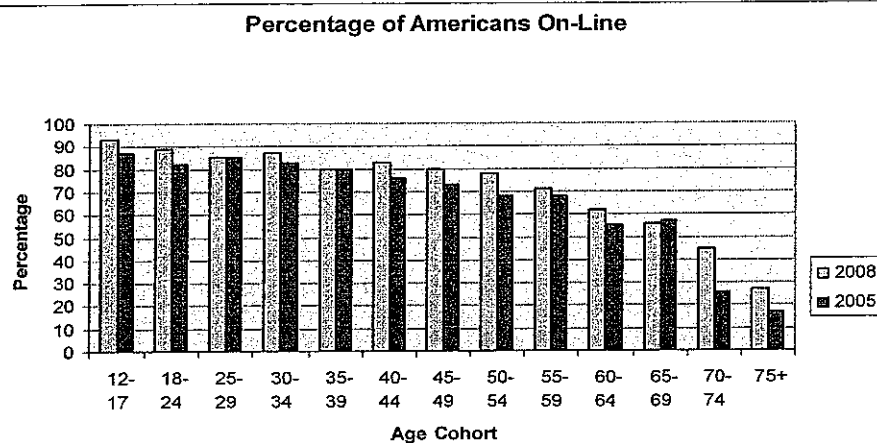
## Advantages to Participants of Offering CDSMP in both In-Person and Virtual Groups

- Provides greater access to a proven, effective self-management course
- Provides programs that accommodate different needs & learning styles
- Builds on the long success of the in-person group model, while simultaneously meeting demands of rapidly growing population of older adults who want the convenience and other advantages of on-line solutions.

## Operational Advantages of Offering CDSMP in both In-Person and Virtual Group Settings

- Offering both settings will increase program uptake
- Community-based moderators and supervisors can be deployed for both venues
- Integrated marketing can be more cost-effective
- Integrated scheduling can better address participants' availability and preferences
- Shared staff training modules and efficiencies
- Shared systems can facilitate data collection at registration and post-completion
- Offering both settings will enable more rapid scaling nationwide

The % of older Americans who are online is large and growing, with especially rapid growth among the 70+ age groups



Source: *Generations on Line: Pew Internet Project Data Memo*  
[http://www.pewinternet.org/pdfs/PIP\\_Generations\\_2009.pdf](http://www.pewinternet.org/pdfs/PIP_Generations_2009.pdf)